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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------|------------------|
| 10/611,468 | 06/30/2003 | Jeffrey L. Strunk | AM9192US01 | 1594 |
| 27723 | 7590 | 10/25/2004 | EXAMINER | |
| KEVIN FARRELL PIERCE ATWOOD ONE NEW HAMPSHIRE AVENUE PORTSMOUTH, NH 03801 | | | MITCHELL, KATHERINE W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3677 | |

DATE MAILED: 10/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|------------------------|---------------------|
| | 10/611,468 | STRUNK, JEFFREY L. |
| Examiner | Art Unit | |
| Katherine W Mitchell | 3677 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 07 October 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-29 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-29 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 6/30/03 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

1. After review of the case in preparation for an interview, examiner has determined that the previous office action should be vacated and a new non-final action citing art relevant to the claims should be prepared. Therefore, the previous office action is vacated and replaced by the following office action.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 6-10, 21, 22, 24, and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Evensen USP 5772379.

Re claims 1 and 22: Evensen Figs 1,2, and 7 teaches a fastener (10) comprising a body with an impact surface (14) and a plug of filler material (18) joined to said impact surface. The method of providing a fastener body and joining a plug to said impact surface is inherently taught by the apparatus, as an item that is shown joined to a second item has inherently been joined to the second item.

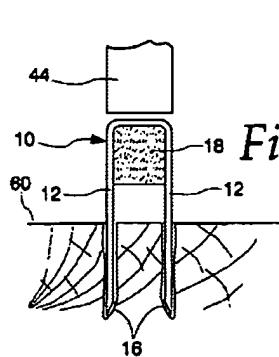


Fig. 7

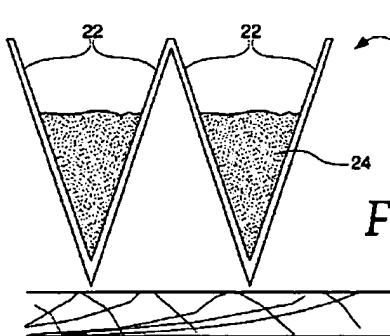


Fig. 2

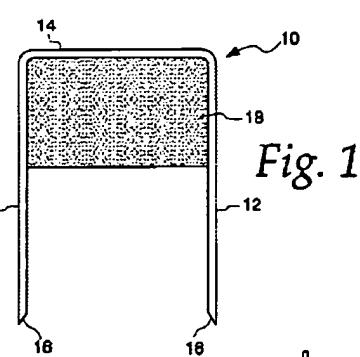


Fig. 1

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Re claims 3 and 24: Wood putty as the filler is taught in col 1 lines 50-53.

Re claims 6 and 27: A plastic material as the filler material is taught in col 1 lines 50-53, as wax is considered a plastic material:

➤ **wax** (wàks) *noun*

1. a. Any of various natural, oily or greasy heat-sensitive substances, consisting of hydrocarbons or esters of fatty acids that are insoluble in water but soluble in most organic solvents. b. Beeswax. c. Cerumen.
2. a. A solid plastic or pliable liquid substance, such as ozocerite or paraffin, originating from petroleum and found in rock layers and used in paper coating, as insulation, in crayons, and often in medicinal preparations

➤ **plas·tic** (plàs'tik) *adjective*

1. Capable of being shaped or formed: *plastic material such as clay*. See *synonyms* at *malleable*.

Re claim 7: The U- shape of the impact surface facilitates the joining of the filler to the impact surface, as the U-shaped sides facilitate the contact. Also, the V-shape (Fig 2) facilitates joining the material to the impact surface also.

Re claims 8 and 28: Fig 2 shows a fastener having a "W" shape; the top of the "W" meets the definition of rough, and was roughened during the forming of the "W" shape:

➤ **rough** (rùf) *adjective*

1. Having a surface marked by irregularities, protuberances, or ridges; not smooth.
2. Coarse or shaggy to the touch: *a rough, scratchy blanket*.

Re claims 9, 21, and 29: Wood putty by its nature is inherently adhesive and capable of adhering, thus an adhesive joins the plug to the impact surface.

➤ **ad·he·sive** (àd-hé'siv, -ziv) *adjective*

1. Tending to adhere; sticky.¹ (note - source is for all 4 definitions on this page)

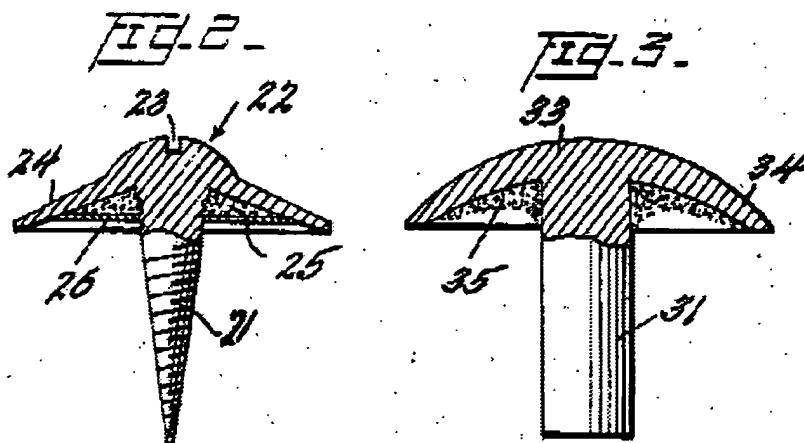
Re claim 10: Fig 1 shows a fastener body with at least 2 legs.

4. Claims 1,2,5,6,7,9,11,12,15-18,20-23,26,27,29 are rejected under 35 U.S.C. 102(b) as being anticipated by Pearce Jr. USP 3469490.

¹ *The American Heritage® Dictionary of the English Language, Third Edition* copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from IHSN Corporation; further reproduction

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Re claims 1,11, 22: Pearce Jr. teaches a fastener, including a nail with a shank, having a head at one end and a plug of filler material (25,35) joined to said head (Figs 2-3, col 3 lines 9-15 and 48-50). The method of providing a fastener body and joining a plug to said impact surface is inherently taught by the apparatus, as an item that is shown joined to a second item has inherently been joined to the second item.



Re claims 2, 5,12, 15, 23 and 26: A filler of acrylic sealant or epoxy adhesive material is taught in col 4 lines 23-46.

Re claims 6,16, and 27: the acrylic material and epoxy are considered plastic materials, in that they are capable of being shaped or formed.

Re claims 7 and18: The dished shape of the impact surface facilitates the joining of the filler to the impact surface.

Re claims 9,21,29: the acrylic material and epoxy are considered adhesives, in that they are capable of adhering. Further, col 5 lines 23-35 teach an additional adhesive.

Re claim 17: The head of Figs 2 and 3 inherently include impact surfaces. The filler material joins the impact surface.

Re claim 19: Col 3 lines 69-71 teach that the dished head can have a bellows type structure, which is inherently roughened.

Re claim 20: The plug of filler material and head have similar cross-sectional shapes, as shown in Figs 2-3.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce Jr. USP 3469490 in view of Evensen USP 5772379. As discussed above, Pearce Jr. teaches a nail with a head a plug of filler material joined to said head. However, Pearce Jr. fails to teach that the filler can be a wood putty. Evensen teaches wood putty as the filler in col 1 lines 50-53. Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Pearce Jr. and Evensen before him at the time the invention was made, to modify Pearce Jr. as taught by Evensen to include wood putty as the filler of Evensen, in order to obtain a common filler that matches the substrate if the substrate is wood. One would have been motivated to make such a combination because a finished appearance would have been obtained, as taught/suggested by Evensen.

7. Claims 4,14, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce Jr. USP 3469490 in view of Warren USP 4829674. As discussed above, Pearce Jr. teaches a nail with a head a plug of filler material joined to said head. However, Pearce Jr. fails to teach that the filler can be a fiberglass resin filler. Warren teaches fiberglass resin filler as a common filler in col 2 lines 34-40. Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Pearce Jr. and Warren before him at the time the invention was made, to modify Pearce Jr. as taught by Warren to include fiberglass resin filler as the filler in order to obtain a common filler that provides additional strength to the substrate if the substrate needs additional reinforcement, as fiberglass fibers provide additional linking properties to assist in bonding. One would have been motivated to make such a combination because a strong finished appearance would have been obtained, as taught/suggested by Warren.

8. Claims 4 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evensen USP 5772379 in view of Warren. As discussed above, Evensen. teaches a nail with a head a plug of filler material joined to said head. However, Evensen fails to teach that the filler can be a fiberglass resin filler. Warren teaches fiberglass resin filler as the filler in col 2 lines 34-40. Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Evensen and Warren before him at the time the invention was made, to modify Evensen as taught by Warren to include fiberglass resin filler as the filler in order to obtain a common filler that provides additional strength to the substrate if the substrate needs additional reinforcement, as

fiberglass fibers provide additional linking properties to assist in bonding. One would have been motivated to make such a combination because a strong finished appearance would have been obtained, as taught/suggested by Warren.

9. Claims 4,14, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce Jr. USP 3469490 in view of Burrell USP 6274651. As discussed above, Pearce Jr. teaches a nail with a head a plug of filler material joined to said head. However, Pearce Jr. fails to teach that the filler can be a fiberglass resin filler. Warren teaches fiberglass resin filler as a common filler in col 1 lines 67. Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Pearce Jr. and Burrell before him at the time the invention was made, to modify Pearce Jr. as taught by Burrell to include fiberglass resin filler as the filler in order to obtain a common low-cost filler that provides additional strength to the substrate if the substrate needs additional reinforcement, as fiberglass fibers provide additional linking properties to assist in bonding. One would have been motivated to make such a combination because a strong finished appearance would have been obtained, as taught/suggested by Burrell in col 2 line 55-col 3 line 23.

10. Claims 4 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evensen USP 5772379 in view of Burrell USP 6274651. As discussed above, Evensen. teaches a nail with a head a plug of filler material joined to said head. However, Evensen fails to teach that the filler can be a fiberglass resin filler. Burrell USP 6274651 teaches fiberglass resin filler as the filler in col 1 line 67. Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Evensen and Burrell

before him at the time the invention was made, to modify Evensen as taught by Burrell to include fiberglass resin filler as the filler in order to obtain a common low-cost filler that provides additional strength to the substrate if the substrate needs additional reinforcement, as fiberglass fibers provide additional linking properties to assist in bonding. One would have been motivated to make such a combination because a strong finished appearance would have been obtained, as taught/suggested by Burrell in col 2 line 55-col 3 line 23.

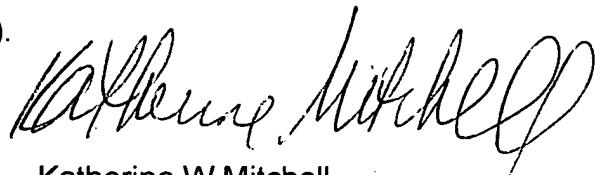
Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W Mitchell whose telephone number is 703-305-6713. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Katherine W Mitchell
Patent Examiner
Art Unit 3677

Kwm
10/11/2004